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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------|---------------------|------------------|
| 09/688,997 | 10/16/2000 | Thomas Nello Giaccherini | HMD2000-1-CIPA | 2970 |

7590 10/13/2004
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EXAMINER

BUI, KIEU OANH T

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2611 | |

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 09/688,997 | Applicant(s) GIACCHERINI ET AL. | |
| | Examiner KIEU-OANH T BUI | Art Unit 2611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/03/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-49 and 54-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-49 and 54-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1-3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-24, drawn to a method for excess communication over the network, classified in class 725, subclass 63.
 - II. Claims 25-49, 54-80, drawn to an apparatus for transmitting the encryption packets of data and decoding data, classified in class 380, subclass 240.
 - III. Claims 50-53, drawn to a propagated signal over network, classified in class 725, subclass 148.
 - IV. Claims 81-96, drawn to a method of protecting data to avoid copying, classified in class 380, subclass 201.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because invention I is a method for excess communication over the network. The subcombination has separate utility such as an apparatus for transmitting the encryption packets of data and decoding data.

Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because invention I is a method for excess communication over the network. The subcombination has separate utility such as a propagated signal over network.

Inventions I and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because invention I is a method for excess communication capacity over network. The subcombination has separate utility such as a method of protecting data to avoid copying.

Remark

3. Applicants elect group II comprising claims 25-49 and 54-80 (included in the restriction/election requirement) without traverse in paper dated 09/03/2004 for examination.

Claim Rejections – 35 USC 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).*

5. Claims 25-41, 47-49, 54-57, 63-75, and 78- 80 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al. (U.S. Patent No. 5,917,830/ or “Chen”).

Regarding claim 25, Chen discloses “an apparatus comprising: transmission means for transmitting digitized packets of data over a network means for communicating said packets of data; said data being transmitted to a plurality of authorized users” (Figs. 1 & 2 as the network system provides digitized packets or digital streams to a plurality of users, see col. 1/lines 5-34); “encryption means for securing said transmitted packets of data against unauthorized copying; decryption means for decoding said transmitted packets of data only by each one of said plurality of authorized users”, i.e., encryption is performed within transcoder 260 (Fig. 2) and authorized users at DET 168 can decode the transmitted packets of data fro viewing/recording at their own times (col. 5/lines 10-18; and col. 21/line 40 to col. 22/line 6); “a secure storage means for storing said secured packets of data”, i.e., stream storage 135 is a secure storage for storing digitized data packets (Fig. 2, and col. 5/lines 18-48); and “reproduction means for reproducing and displaying information contained in said decoded packets of data” (cable headend reproduces and displays information to the users, see col. 5/lines 35-48).

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As for claims 26 and 27, Chen teaches “in which said digitized packets of data contain proprietary information” and “in which said decryption means is unique to each one of said authorized users”, i.e., based on Program Specific Information PSI and packet identification PID as well as other attributes as PMT, PAT, ISB ... each user has unique or single proprietary information for himself/herself (col. 6/line 33-53; and col. col. 14/line 56-col. 15/line 3).

As for 28, Chen inherently teaches “in which said transmission means employs said network means during a time period when a total communications capacity of said network means is not fully utilized”, i.e., system manages to control the transmission of data to avoid data overflow under video buffer manager 425 and buffer controller 465 for the transmission process (Fig. 4, and col. 5/line 62 to col. 6/line 53).

As for claim 29, Chen discloses “in which said packets of data are delivered to each one of said plurality of users in a plurality of deposits” (Figs. 4-5-6 shows that streams of packets of data comprising multiplex of signals, i.e., one hundred or more channels, are delivered to plurality of users, see col. 5/lines 18-48).

As for claims 30-32, Chen shows “in which said transmission means is ubiquitous”; “in which said network means is global”; and “in which said network means is scalable” (Figs. 1 & 2 as the network can be scalable to a cable television network, or to a global network or ubiquitous (everywhere) using satellites or internet gateways (col. 2/lines 15-34 for HFC network, and col. 4/lines 12-43 for a global network using satellites and gateways).

As for claim 33, Chen inherently shows “in which said decryption means is partitioned into a first partial decryption means and a second partial decryption means”, i.e., decryption 248 at receiver 244 receives multiplex signals as noted above, it must function as partitioned

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decryption means for decrypting appropriate multiplex signals such as for video, audio, texts and so on.

As for claim 34, Chen discloses “in which said storage means is partitioned into a low-data-rate data accumulator and a high-data-rate data accumulator” (col. 4/lines 39-44 for a variety of storage means for storing of low-data-rate data and high-data-rate data).

As for claims 35-37, Chen teaches “in which said packets of data include digitized, high-definition video signals”; “in which said packets of data include digitized audio signals”; and “in which said packets of data include digitized text data” (digital stream data includes video, audio, and text data, col. 4/line 63-col. 5/line 18, and col. 14/line 56 to col. 15/line 3).

As for claims 38-41, Chen suggests “in which said reproduction means includes a high definition television means for reproducing and displaying said decoded data packets”; “in which said reproduction means includes a computer for reproducing and displaying said decoded data packets”; “in which said reproduction means includes an audio tape player for reproducing and displaying said decoded data packets”; and “in which said reproduction means includes a video tape player for reproducing and displaying said decoded data packets”, i.e., a digital entertainment terminal is used for reproducing and displaying decoded data packets at the user either via a television, a computer, and/or mixer used in audio, radio, television and recording studios—suggesting the use of video recorder and/or audio tape player (col. 21/line 40 to col. 22/line 6).

As for claim 47, Chen shows “in which said transmission means overlays said network means” (as shown in Figs. 1-4).

As for claims 48-49, Chen shows “in which said first partial decryption means is disposed in said storage means” and “in which said second partial decryption means is disposed in said reproduction means”, i.e., a DET at the user contains decryption means and storage means for decoding, storing, retrieving, and reproducing data to the users (col. 21/line 40-col. 22/line 6).

As for claims 54-57, 63-75, and 78- 80, these claims for a corresponding method of the claiming apparatus are rejected for the reasons given in the scope of apparatus claims 25-41 and 47-49 as disclosed in details above.

Claim Rejections - 35 USC 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 42-46, 58-62, and 76-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Patent No. 5,917,830).

Regarding claims 42-46, 58-62, and 76-77 in further view of claim 26, Chen does not disclose “in which said proprietary information includes first-run movies”; “in which said proprietary data includes first-released dramatic presentations”; “in which said proprietary data includes first-released musical presentations”; “in which said proprietary data includes first-released recordings”; and “in which said proprietary data includes first-released books” as well as providing a printer includes a pager binder; however, these feature are not novel in the art

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because they are all referred to products and services offered from the vendors and from software applications, and the list could be go on forever depending on the advertisers to make a presentation for their products and services via the proprietary information to each customer. Therefore, the Examiner takes an official notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chen's system with well known features as cited in claims 42-46, 58-62 and 76-77 in order to provide advertisements for products and services from vendors via the propriety information connection between the headend system and the user/subscribers.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wachob (US. Pat. No.5,231,494) discloses the selection of compressed television signals from single channel allocation based on viewer characteristics.

Lappington (US. Pat. No.5,526,035) discloses a transaction based interactive television system.

Lighfoot et al. (US. Pat. No.5,583,864) disclose a level 1 gateway for video dial tone network.

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant, can be reached on (703) 305-4755.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui
Art Unit 2611
September 29, 2004



**KRISTA BUI
PATENT EXAMINER**